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Memorandum

To: Colorado Retirement Savings Board

From: Econsult Solutions, Inc.

Date: October 22, 2019

RE: Fiscal Impact Study Task 1: Defining Revenue and Expenditure Categories

Overview

The financial capacity of elderly households to maintain their living standards during their retirement years has significant quality of life implications for Colorado residents. Further, the issue has significant implications for the state's fiscal and economic health.

Importantly, anticipated changes in the state's population distribution due to the aging of the outsized baby boomer cohort will have impacts on the state's fiscal position independent of any changes in savings behavior. These effects were summarized in a recent report by the Colorado Futures Center at Colorado State University for the Colorado Strategic Action Planning Group on Aging entitled *The Effects of Aging on Colorado's Revenue and Expenditures: A View to 2030*. Our analysis builds on this framework with respect to the revenue and expenditure categories identified.

On top of these demographic changes, the level of savings achieved by future retirees will dictate their level of income available in retirement. This in turn will determine eligibility and benefit levels for many state funded programs, as well as disposable income that elderly households have to circulate in the state economy.

This analysis quantifies two broad categories of public impacts from insufficient savings for elderly Coloradans:

1) **Current and future expenses to the state for public assistance programs for elderly residents**. State funding supports programs for elderly residents which will increase in demand as the elderly population grows. In addition, many of these programs like medical services under Medicaid are means-tested for eligibility and/or benefit levels, meaning that the level of income available to the state's elderly population has significant impacts on state assistance costs.
2) **The loss of revenue resulting from decreased economic activity due to reduced household spending by elderly households.** The income level of elderly households also impacts their level of spending on a variety of goods and services each year. Household spending losses ripple through the economy, resulting in lower levels of activity and employment within the state economy, and less tax revenue accruing to the state government.

The purpose of this memo is to identify the categories of expenditures and revenue that will be impacted by changes in the characteristics of Colorado's elderly population. Our expenditure analysis is most focused on means-tested programs, where eligibility and state outlays will be impacted by the level of savings held by households as reflected in their annual income. This framework excludes general state services used by both the senior and non-senior populations (such as programs related transportation, corrections, housing, etc.) which are not materially impacted by senior income levels, as well as programs that are fully federally funded.

Expense Impact

Colorado administers a variety of programs that provide elderly residents services ranging from medical care to housing rebates to transportation assistance. The largest of these programs is Medicaid, which uses a mix of state and federal funds to provide supplemental medical services to qualifying elderly residents (including long-term care)[1]. Our analysis identifies both means-tested programs, and non-means tested programs which are focused on the senior population.

Means-Tested Programs

Many programs serving elderly residents are means-tested to determine program eligibility and/or program benefit levels. The inverse correlation between income level and state assistance costs means that insufficient retiree savings have a significant impact on state expenditures for these programs.

Medicaid: Medicaid (called Health First Colorado) is a jointly funded federal/state program to provide medical services to eligible low income populations. There are two cohorts of aged populations in Colorado served by Medicaid – Adults 65 and Older (OAP-A) and "Partial Dual Eligible" beneficiaries who qualify to have Medicaid pay certain expenses they incur under Medicare. Covered populations in these two cohorts represent a substantial proportion of total Medicaid expenditures in CO on services such as long term care, assistance with Medicaid premiums, and home-based and community services. Component programs vary in terms of their eligibility and benefit rules, and therefore will require discrete modeling to determine the impacts of differing levels of retirements savings.

In aggregate, Medicaid expenditures for elderly Coloradans are estimated at approximately 16 percent of the state's overall Medicaid spending,[2] or $1.7 billion in FY 2019-20, of which nearly 30 percent is attributed to the General Fund. Medicaid expenditures for elderly Coloradans comprised of 16 percent of the total Medicaid expenditures in Colorado for FY 2019-2020 ($10.5 billion).[3]

Administering Agency: Department of Health Care Policy & Financing (HCPF)

Old Age Pension Program: The Old Age Pension (OAP) program provides financial assistance to elderly, low-income Colorado residents. To be eligible for the program, residents must be 60 years or older and meet income and resource eligibility criteria. Program payments vary each month and are provided at an amount to supplement the participant's current income to an income determined to be the minimum acceptable level of income for a particular year In FY 2019-20, the OAP requested more than $105 million for eligible seniors in Colorado.

Administering Department: Department of Human Services (DHS)

Home Care Allowance (DHS): The Home Care Allowance program provides financial assistance to elderly, low-income, and/or disabled Colorado residents for home care services which allows them to continue living independently and avoid placement in a nursing home. To be eligible for the program, applicants must be 18

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[1] Most Medicaid spending for the elderly population is for "dual eligible" enrollees who qualify for both federally funded Medicare (due to their age) and jointly funded Medicaid (due to income-based or other qualification standards)

[2] "Improving Health & Quality to Help Coloradans Thrive (FY 2017-2018 Annual Report)," *Department of Health Care Policy and Financing*

[3] Based on projections from the HCPF. See: https://www.colorado.gov/pacific/sites/default/files/S-1A%2C%20BA-1%2C%20MSP%20Exhibit%20A.pdf

years or older and receive Supplemental Security Income (SSI) or be in the Colorado Aid to the Needy Disabled (AND) program. In FY 2019-20, the program requested nearly $9.4 million in cash assistance to disabled seniors.

Administering Department: DHS

Dental Health Care Program for Low-Income Seniors: The program serves persons over the age of 60 who have a maximum income of 250% of the most current published Federal Poverty Level (FPL) and who do not have or qualify for any other dental insurance such as Medicaid. The HCPF, which also oversees Colorado's Medicaid spending, spent $2.9 million on this program in FY 2019-20.

Administering Department: HCPF

Low Income Energy Assistance (DHS): Federally-funded, state-supervised, county—administered system designed to assist with winter heating costs for low-income Coloradans. To be eligible for the program, applicants must have an income less than 165% of the Federal Poverty Line and is vulnerable to rising heat costs. Approximately 12.5 percent of the individuals served by the program are 65+ and in FY 2019-20, the department requested $6.0 million on elderly Coloradans through this program.

Administering Department: DHS

Additional Senior Targeted Programs

In addition to means-tested programs outlined above, the following programs also serve Colorado seniors and will be impacted by the size of the elderly population and the level of retiree savings.

Senior Property Tax Exemption: The Property Tax Exemption program allows seniors to reduce their local property tax bill. Qualified applicants – a senior who is 65 or older or a surviving spouse of a senior who previously qualified – receive an exemption from taxation on 50 percent of the first $200,000 in actual value of their primary residence. An estimated $142.5 million in payments are expected to be made in FY 2019-2020.

Administering Department: Department of the Treasury

Senior Property Tax Deferral: The Property Tax Deferral program allows seniors aged 65 and older who likely live on a fixed income to continue to afford living their homes by deferring the payment of their property taxes. In order to qualify, the property must be owner occupied and all prior property tax bills must be paid. The State Treasurer's office makes tax payments to county governments on behalf of qualifying elderly home-owners. This payment is recorded as a lien against the program participant's property and due for repayment when the participant no longer qualifies to defer property taxes. As of 2016, the principal and interest on deferrals totaled $9.3 million statewide. Since deferrals ultimately come due to the state with interest, this program is not anticipated to have a material net budgetary impact over and extended time horizon.

Administering Department: Treasury

Older Americans Act – Area Agencies on Aging (AAA) and State Funding for Senior Services (SFSS): The federal Older Americans Act created an "Aging Network" of 16 Area Agencies on Aging (AAAs) around the state that contract with local service providers to offer an array of support services to older Colorado residents, such as transportation, legal assistance, and personal care. In order to direct additional resources to the AAAs, the Older Coloradans Cash Fund was created to provide state funding support for AAAs, referred to as State Funding for Senior Services (SFSS). To be eligible for the program, applicants must be 60 years or older. While the program is not means tested, its resources are targeted to participants with the greatest demonstrated social and economic need. For FY 2019-20, Colorado's the department requested $1.3 million for the AAAs, another $28.5 million for SFSS, and $17.5 million for other Older Americans Act programs. These other programs include a variety of social services like meals on wheels.

Administering Department: DHS

Adult Protective Services: The Adult Protective Services program provides protective services to prevent, reduce, or eliminate the existing or potential risk of mistreatment or self-neglect of at-risk adults. To be eligible for the program, applicants must be adults 18 years or older (76 percent of participants are over 60) and susceptible to mistreatment or self-neglect due to inability to perform or obtain necessary services because they lack sufficient understanding or capacity to make or communicate responsible decisions. DHS requested $14.2 million for FY 2019-2020.

Administering Department: DHS

Veterans Community Living Centers: Veterans Community Living Centers are a state-supervised system of nursing homes for veterans and families of veterans offering long-term care, short-term rehabilitation, assisted living, and other services. Honorably-discharged veterans, spouses/widows of veterans, and Gold Star parents (of children who died while serving in the Armed Forces) are eligible for services. Of the population served by the program, 98 percent are over 60 years old. Currently, state Division of Veterans Affairs operates five locations throughout the state. Total program expenditures are more than $50 million annually, with nearly all funding coming from the federal Department of Veterans Affairs. State expenditures to support the program total $1 million per year from the General Fund to support program administration.

Administering Department: DHS

Figure 1 below summarizes preliminary modeling of total program expenditures for these programs in FY 2020, and the estimated share of those expenditures driven by the senior population. State expenditures on these programs for senior residents are estimated to total approximately **$2 billion.**

Figure 1: State Expenditures on Senior Population

Program	Administering Department	State Expenditures FY 2020 ($M)	Est. State Expenditures on Elderly Residents FY 2020 ($M)
Means-Tested			
Medicaid	HCPF	$10,536.4	$1,685.8
Old Age Pension	DHS	$105.6	$105.6
Home Care Allowance	DHS	$9.4	$9.4
Dental Health Care	HCPF	$3.0	$3.0
Energy Assistance	DHS	$48.1	$6.0
Senior Targeted			
Property Tax Exemption	Treasury	$156.3	$156.3
Older Americans Act	DHS	$17.6	$17.6
Adult Protective Services	DHS	$19.4	$14.2
Veterans Community Living	VA	$1.0	$1.0
Total		**$10,896**	**$1,999**

Revenue Impact

Anticipated changes in Colorado's population distribution and the level of retirement savings will also have a significant impact on state revenue. Critical revenue streams are impacted by the income available to senior households both directly through taxable income, and indirectly through the downstream impacts of the level of household spending by elderly households (which is a function in part of their disposable income). These downstream impacts bear on the overall economic activity level of the state, impacting corporate, sales and fuel taxes as well as the income available to non-senior households.

Direct: Income Tax

Personal income taxes estimated to total $8.3 Billion in FY 2019-2020 and represent the largest revenue source for the general fund. Elderly Coloradans bear a portion of this burden based on their level of taxable income. Federal law permits an income tax credit for individuals aged 65 or older with either adjusted gross income or total non-taxable Social Security, pensions, and annuities under certain limits. Colorado law allows the exclusion of pension and annuity income of up to $24,000 for individuals aged 65 and older.

Data from the 2015 Statistics of Income report from the Colorado Department of Revenue indicates that senior households accounted for about 16% of total personal income tax collections for the state. Accounting for growth in the share of the population represented by elderly residents, seniors are anticipated to account for about 17% of personal income tax revenue in FY 2020, representing around $1.4 billion in state income tax.

Downstream: Household Spending

The income levels of Colorado's elderly households also affect their level of disposable income and household expenditures. Household spending has "spillover impacts" through that state economy, causing additional waves of spending through the supply chain and through the recirculation of employee earnings supported by the initial spending. Accordingly, reductions in senior income and spending will have implications for a variety of tax bases and revenue streams. These spillover impacts will be assessed using the industry standard IMPLAN input-output modeling framework.

Direct and spillover household spending will have material impacts on the following tax bases:

> **Sales tax** accounts for roughly one-quarter of the General Fund budget and is estimated to total $3.2 billion in FY 2019-2020. Because older households typically spend less than younger households, sales tax revenue will be affected by the aging of the population. The magnitude of this impact will be influenced by the level of income available to households in retirement. Elderly households with insufficient retirement savings will further reduce their household spending resulting in greater reductions in sales tax revenue.

> **Corporate income taxes** are anticipated to equal about $800 million in FY 2019-2020, accounting for 7 percent of total General Fund revenue. The economic activity associated with household spending creates earnings for businesses that are subject to corporate income taxes. Consequently, lost activity resulting from a reduction in retirement income negatively impacts corporate tax revenue.

> **Personal income taxes** for non-senior residents will be impacted by the downstream impacts of senior household spending on economic activity and employment. As noted above, personal income tax is anticipated to generate $8.3 billion in revenue in FY 2019-2020, accounting for 63% of the general fund.

The income level of Colorado's elderly households will also affect Cash Fund revenue. The state Cash Fund will account for an estimated $2.5 billion in revenue in FY 2019-2020, over half of which is transportation-related. **Motor fuel taxes** are the largest source of transportation-related revenue, totaling over $600 million annually. A reduction in retirement income limits the ability of elderly households to spend on a variety of goods and services, including motor vehicle fuel, resulting in decreased transportation related revenue.

Property Tax

The financial position of elderly households impacts state and local fiscal positions through its relationship with the property tax. Local governments are funded through a combination of residential and commercial property tax assessments, while state funding streams interrelate with local property taxes through programs like the property tax exemption and through mechanisms like education funding.

Within the context of this study, however, the relationship between retirement savings and property tax is less definitive than the relationship between retirement savings and available income. While increasing retirement savings levels translates cleanly to increased disposable income available in retirement, it does not necessarily imply a greater investment in housing (in particular since many senior households will have already paid off a mortgage). Property values also operate within the broader context of a market dictated by supply and demand, and facing cross-pressures from a growing but aging population. Due to this range of complications, it is recommended that potential property tax impacts are excluded from the categories of revenue analysis within this study.

TABOR

State and local government revenue growth is limited statutorily by the Taxpayer's Bill of Rights (TABOR) approved by voters in 1992. TABOR limits annual state revenue growth to inflation plus population growth, with remaining revenue generated by economic growth refunded to local governments for property tax exemptions, income tax payers, and sales tax payers (depending on the amount of revenue in excess of the cap).

Anticipated changes in revenue over time will need to be understood within the context of this framework. In addition, as program expenditures needs increase from changes in the demographic composition or income level of the population, this revenue limit may lead to greater pressure on available funding for other programs.

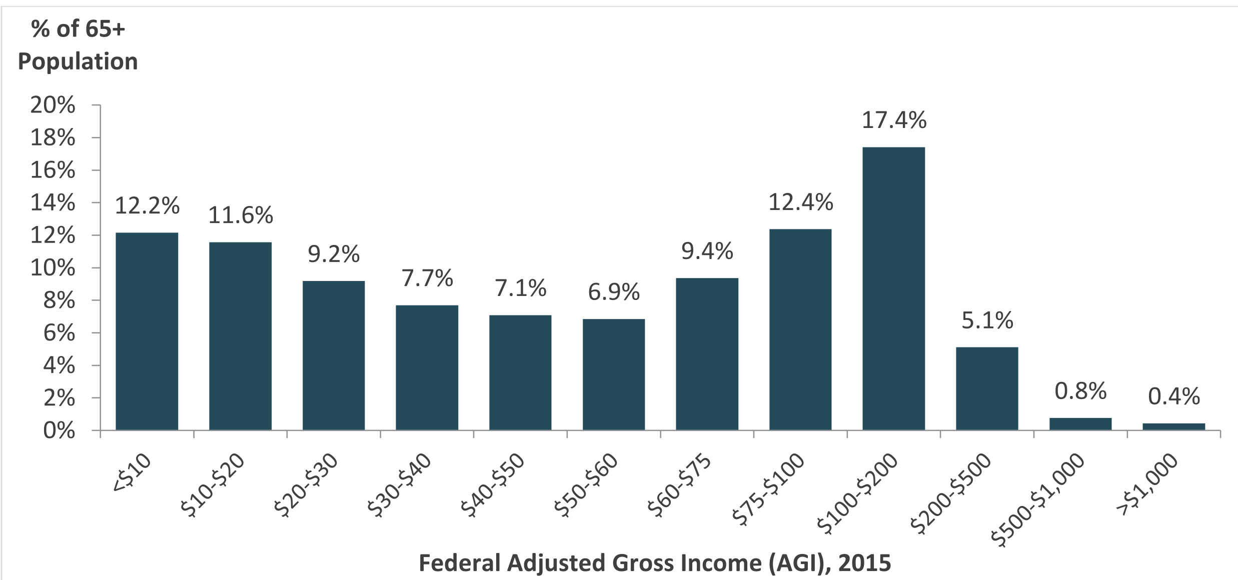
Next Steps

The expenditure and revenue categories outlined above represent the key budgetary areas impacted by the level and characteristics of Colorado's senior population. Subsequent analysis will quantify the fiscal impacts of anticipated changes in population patterns (driven by the aging of the baby boom generation), and potential impacts from achieving sufficient levels of retirement savings among that future elderly population.

To do so, the analysis will proceed in the following tasks:

Task 2: Estimate per capita impacts by income level for the expenditure and revenue categories outlined above. This analysis will codify the relationship between senior income levels and state fiscal impacts, allowing for modeling of the fiscal impacts of increased retirement savings.

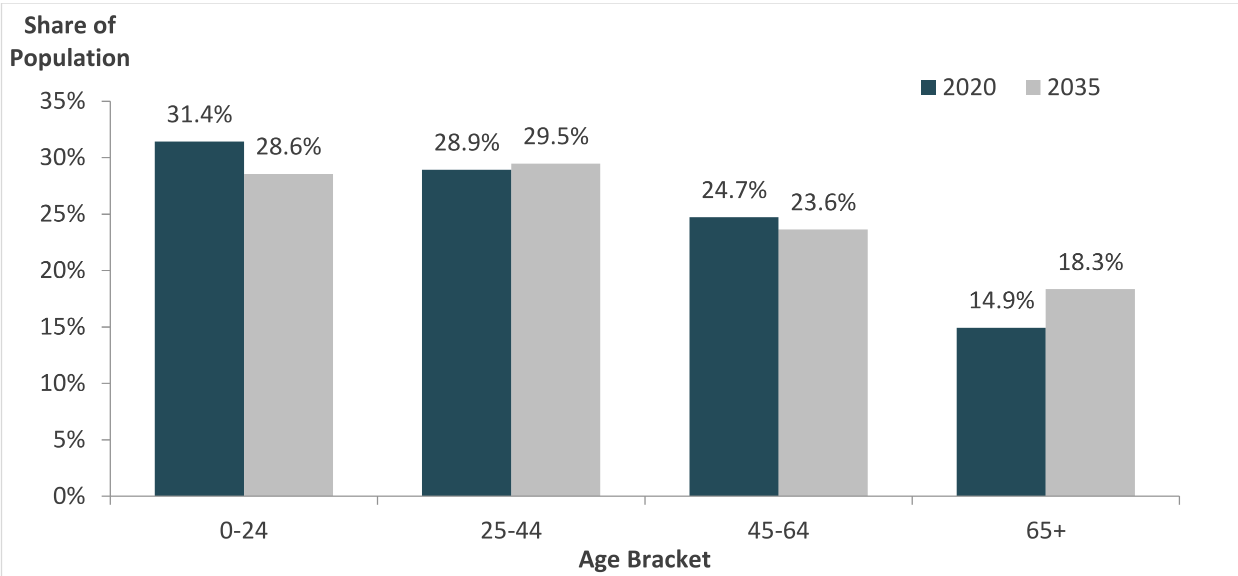
Figure 2: Colorado 65+ Population by Income Band



Source: Colorado Department of Revenue (Statistics of Income)

Task 3: Quantify impacts from demographic change by matching per capita impacts in the expenditure and revenue categories outlined above with anticipated elderly population growth. This analysis will identify the fiscal impacts of population aging independent of any changes in retirement savings.

Figure 3: Projected Colorado Population by Age Band



Source: Colorado State Demography Office

Task 4: Quantify impacts from a change in retirement savings levels will combine the above tasks by modeling fiscal impacts for the projected elderly population under an alternative scenario in which retirement savings are increased to recommended levels. The difference between fiscal impacts under this scenario and the Task 3 scenario considering only demographic change represents a measure of the fiscal impact attributable to an increase in savings levels.

Key Recommended Study Parameters

- Time horizon for analysis: 2020-2035
- Targeted income replacement level for retirees: 75% of working age (50-64) income
- Replacement income “floor: Federal Poverty Level (FPL)
    - Minimum targeted replacement income level would be set to FPL ($12,500 for 1 person HH, $16,900 for 2 person HH)
- Replacement income “ceiling”: $100,000
    - Retirement incomes above $100,000 (top 25% of the senior population) would be considered sufficient regardless of whether they meet the 75% income replacement standard